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SOME RESULTS OF A THIRD SUMMER'S BOTANIZING IN OKLAHOMA

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DURING the summer of 1949 the author continued his investigations of the Oklahoma Flora as Botanist with the Oklahoma Biological Survey, University of Oklahoma. As in the past, the most interesting and taxonomically productive regions have been the Black Mesa area of the Oklahoma panhandle, extreme southwestern and extreme southeastern Oklahoma. The author has listed some of the characteristic species of these areas (RHODORA: 51: 19-21, 1949 and RHODORA 51), so it seems needless to repeat them here.

The following enumeration is concerned principally with species which the author has not found recorded from the state, and with distribution notes concerning species rarely collected in Oklahoma. The species believed to be newly reported for the state are prefixed with an asterisk. This assumption is based on checking the plants listed in Jeffs and Little, *A Preliminary List of the Ferns and Seed Plants of Oklahoma* (1930), Stemen and Myers, *Oklahoma Flora* (1937), Featherly, *Manual of the Grasses of Oklahoma* (1946), Hitchcock, *Manual of the Grasses of the United States* (1935), and on available monographs and other publications hereinafter cited. There are 36 such additions recorded. Specimens are usually cited so anyone in the future may know upon what basis these reports rest. The cited material is in the Bebb Herbarium of the University of Oklahoma, unless otherwise stated. Duplicates of the author's collections, when available, will be sent later to a few other herbaria.

ENUMERATION OF SPECIES

**AGROSTIS EXARATA* Trin. was collected as *Waterfall* 9105, bed of North Carrizo Creek, 4 miles north of Kenton, Cimarron County, June 27, 1949.

It is not listed from Oklahoma by Featherly (*op. cit.*). Hitchcock (*op. cit.*: 336) shows its occurrence in the adjoining states of Colorado and New Mexico. The cited collection has rather dense panicles and unawned lemmas.

**CENCHRUS PAUCIFLORUS* Benth. Of 37 sheets of *Cenchrus* in our herbarium, all previously referred to *C. paucifloris*, 36 are representative of *C. longispinus* (Hackel) Fern. One is representative of *C. pauciflorus* Benth. as circumscribed by Fernald.¹ It is *Hopkins* 1004, wet sandy dunes along the Salt Fork of the Red River, 3 mi. west of Altus, Jackson County, October 24, 1936.

**ORYZOPSIS MICRANTHA* (Trin. and Rupr.) Thurb. This species was taken as *Waterfall* 9090 in a canyon on the northern slopes of Black Mesa, 3 miles north of Kenton, Cimarron County, June 27, 1949.

Hitchcock (*op. cit.*: 416) says it is found "from Saskatchewan to Montana, south to New Mexico and Arizona." The awn is early deciduous.

**PANICUM RAMISETUM* Scribn. This species was collected as *Waterfall* 8990, mixed gypsum and dolomite, low hill south of Buck Creek, 4 miles west and 6½ miles south of Hollis, Harmon County, June 14, 1949.

Hitchcock (*Manual of Grasses of the United States*: 612. 1935) states that the range of the species is southern Texas and Northern Mexico. In the Bebb Herbarium of the University of Oklahoma the nearest collection is *Charles Smith* 131, 12 miles northwest of San Angelo, Tom Green County, Texas.

SPOROBOLUS GIGANTEUS Nash was taken as *Waterfall* 9039 from the Waynoka sand dunes, north of the Cimarron River south of Waynoka, Woods County, June 24, 1949.

According to Hitchcock (*op. cit.*: 406) the then known range of *S. giganteus* was "western Texas to Arizona". Featherly (*op. cit.*: 59) says that it has been collected in Woodward County.

TRISETUM INTERRUPTUM Buckl. In Hitchcock (*op. cit.*: 287) the range is given as being from Texas to Colorado and Arizona. Featherly (*op. cit.*: 61) says it is found in Payne County, Okla-

¹ Fernald, M. L. *Virginia Botanizing Under Restrictions*. *RHODORA* 45: 387-388. 1943.

homa. We have this species as *Jack Engleman* 166, Blaine County, April 26, 1937, and as *Waterfall* 8926, overgrazed pasture on red sandstone of the Quartermaster Formation, 11 miles south of Cheyenne, Roger Mills County, June 13, 1949.

**ELEOCHARIS GENICULATA* (L.) R. and S. (*E. caribaea* (Rottb.) Blake). So referred is *Waterfall* 3102, bank of pond south of fairgrounds, Oklahoma City, Oklahoma County, July 26, 1941.

This is not in the list of Jeffs and Little (*op. cit.*), and I do not find it elsewhere recorded from the state.

**ELEOCHARIS PARVULA* (R. & S.) Link, var. *ANACHAETA* (Torr.) Svens. So determined is *Waterfall* 3102 (a), bank of pond south of fairgrounds, Oklahoma City, Oklahoma County, July 26, 1941.

In his distribution map of var. *anachaeta* Svenson (*RHODORA*: 36: 387. 1934) maps an ellipse which includes Oklahoma, but shows no dots representing collections from the state.

**SCIRPUS SAXIMONTANUS* Fernald. We have this species as *Penfound* 381, in shallow water, upper burhead zone, Gate Playa, near Gate, Beaver County, August 16, 1949.

When describing *S. saximontanus* Fernald (*RHODORA*: 3: 251. 1901) cited specimens from Colorado, Texas and San Luis Potosi.

POLYGONUM DUMETORUM L., forma *CRISTATUM* (Engelm. and Gray) Robinson. At the University of Oklahoma there is one sheet so referred. It is *Waterfall* 1770, open woods, 5 $\frac{3}{4}$ miles west of Oklahoma City, Oklahoma County, September 11, 1939.

RUMEX PULCHER L., ssp. *DIVARICATUS* (L.) Murb. The material of *R. pulcher* so far collected in southeastern Oklahoma appears referable to ssp. *divaricatus* as described by Rechinger.¹ The leaves are not panduriform, and the toothed valves of the fruit are about as long as broad, as is described for ssp. *divaricatus*.

**EUROTIA LANATA* (Pursh) Moq. This species was collected as *Waterfall* 9230, top of Black Mesa, 3 miles north and 1 mile east of Kenton, Cimarron County, August 9, 1949.

**ALTERNANTHERA REPENS* (L.) Kuntze. Referred to this species are plants collected as *Waterfall* 9159, roadside, Marietta, Love County, July 15, 1949.

Cory (*op. cit.*) lists it from the adjacent Blackland Prairie area of Texas.

**AMARANTHUS ALBUS* L., var. *PUBESCENS* (Uline & Bray) Fern. So assigned are several sheets of *A. albus* (*A. graecizans*

¹ Rechinger, K. H., *The North American Species of Rumex*, Field Mus. Nat. Hist.—Bot. 17: 130. 1937.

of auths.) which are viscid-puberulent, but not densely so. Representative are: *Rotha Bull* 299, 3 miles northwest of Granite, Greer County, August 9, 1931, and *McMurry* 538, Wichita Mountains, Comanche County, August 22, 1938.

Var. *pubescens* ("densely viscid-puberulent") is said to occur from "Nevada to southern Colorado and New Mexico." (*N. Am. Fl.* **21** (2): 116. 1917).

*AMARANTHUS SCLEROPOIDES Uline and Bray. So referred is material collected as *Waterfall* 8596, 3 miles west of Orienta, Major County, August 20, 1948.

In the North American Flora (**21** (2): 104. 1917) this species is said to occur in central and western Texas.

*PORTULACA LANCEOLATA Engelm. This species is easily recognized by the winged capsule-rim. We have at the Bebb Herbarium of the University of Oklahoma *Demaree* 13013, North Cache Creek, Medicine Park, June 19, 1936.

In the North American Flora (**21** (4): 330. 1932) the distribution is stated as being "western Texas to Arizona and Lower California; Georgia; Cuba and Jamaica". It is interesting to note that the type locality is "Granite region of western Texas", and that the Wichita Mountains are predominantly granite.

DELPHINIUM VIRESCENS Nutt. (TYPICAL).

In Jeffs and Little's *Preliminary List . . . D. Penardi* Huth is found in the synonymy of *D. virescens* Nutt. The material in our herbarium that was available for study prior to the time of that publication has all been assigned to typical *D. virescens* by Ewan.

D. VIRESCENS, ssp. *PENARDI* (Huth.) Ewan. The monographer of the genus when studying our material in 1944 annotated two sheets as ssp. *Penardi*. They are: *Goodman* 2569, sides of butte, 8 miles south of Watonga, Blaine County, May 25, 1935, and *Goodman* 2619a, Antelope Hills, Roger Mills County, May 26, 1935.

**D. VIRESCENS*, ssp. *WOOTONI* (Rydb.) Ewan. So annotated by Ewan is *Demaree* 12362, low hills, Carmen, Alfalfa County, May 1, 1936.

LINDERA BENZOIN (L.) Blume, var. *PUBESCENS* (Palm. and Steyerem.) Rehder, (*Benzoin aestivale* (L.) Nees, var. *pubescens* Palm. and Steyerem. *Ann. Mo. Bot. Gar.* **22**: 545. 1935.)

The range given by Palmer and Steyermark when they described the pubescent variety (*loc. cit.*) included Oklahoma. Of

the 16 sheets we have in our herbarium from the eastern part of the state, 10 are var. *pubescens*, and 6 are of the glabrous var. *typica*.

**DRABA REPTANS* (Lam.) Fern., var. *MICRANTHA* (Nutt.) Fern. Of 59 sheets of *D. reptans* from Oklahoma in our herbarium, 57 sheets are the typical glabrous-fruited var. *typica*. Two are referable to the hispid-fruited var. *micrantha*. They are: *Couch* C-3, Arbuckle Mountains, Murray County, March 6, 1938, and *Stevens* A3055.2, without data.

Fernald¹ states that the range of var. *micrantha* is from "Louisiana to southern California, north to Illinois, Minnesota, South Dakota, Montana and Washington".

**SISYMBRIUM OFFICINALE* (L.) Scop., var. *LEIOCARPUM* DC. Of the 6 sheets of *S. officinale* in our herbarium 5 have glabrous fruits, the other one has the pubescent fruits of the typical variety.

**PHYSOCARPUS OPULIFOLIUS* (L.) Maxim., var. *INTERMEDIUS* (Rydb.) Robins. This species was collected as *Waterfall* 9198, wooded calcareous slopes, 3 miles west and 2½ north of the state line west of Siloam Springs, Delaware County, July 27, 1949.

It has been collected previously in Arkansas (*Gray's Manual*, ed. 7: 456).

**ASTRAGALUS AUSTRINUS* (Small) E. D. Schultz. So referred is *Waterfall* 7800, shallow sand on gypsum, 4 miles east and 4 south of El Dorado, Jackson County, June 5, 1948.

Cory (*op. cit.*) lists this species from the adjacent Plains area of Texas. Rydberg (*N. Am. Fl.* **24** (7): 431. 1924.) says that it ranges from "Texas to Colorado, Utah, Lower California and Durango."

**ASTRAGALUS HUMISTRATUS* Gray. So referred is *Waterfall* 9077, top of Black Mesa, 2 miles north of Kenton, Cimarron County, June 27, 1949.

In the North American Flora (**24** (6): 315. 1929.) this species is said to occur from southern Colorado to Chihuahua and Arizona.

ASTRAGALUS LINDHEIMERI Gray. At the Bebb Herbarium of the University of Oklahoma this species is represented by *Waterfall* 7819, saline plain, 4½ miles south of Hollister, Tillman

¹ Fernald, M. L., *Draba in temperate Northeastern America*. *RHODORA* **36**: 368. 1934.

County, June 5, 1948. In the herbarium of Oklahoma A. & M. College there is a sheet, *Louise Perrin* 40, one mile north of Altus, Jackson County, April 18, 1937.

Rydberg (*N. Am. Fl.* **24** (7): 428. 1929.) restricts its distribution to Texas.

DALEA NANA Torr. The only location from which the author has found this species in Oklahoma is in the stabilized sand-dunes west of Boise City, Cimarron County, where it was collected as *Waterfall* 9052.

**MODIOLA CAROLINIANA* (L.) G. Don. was collected as *Waterfall*, 8888, edge of woods along road, 4 miles south and 2 miles east of Tom, McCurtain County, June 6, 1949.

In our country this monotypic genus has been known previously¹ from Florida to Texas and Virginia.

OENOTHERA CANESCENS Torr. and Frem.

This species had been collected in Texas, near Amarillo, and in Kansas, including the type (*Am. Journ. Bot.* **19**: 767. 1932). Therefore it should be expected in the Oklahoma panhandle. Penfound has collected it in Hitchland Playa, near Hitchland, Texas County (*Penfound* 351), but the map shows the playa to be just over the state line in Texas. He states that he has seen it in Griggs Playa, Cimarron County, but we have no confirmatory herbarium specimen. Since the species is so distinct from other Oklahoma *Oenotheras* we may be fairly certain that it occurs in the state, but confirmation, by way of herbarium material, is still needed.

ASCLEPIAS MACROTIS* Torr. Although the present author mentioned *A. macrotis* as an associate of *Sarcostemma lobatum* when he described the latter (*RHODORA* **51: 59. 1949), it apparently has not been otherwise reported as a part of the state flora. We have several collections of *A. macrotis*, all from the mesa area of northwestern Cimarron County.

**ASCLEPIAS OBOVATA* Ell. This species has been collected as *Waterfall* 8102, prairie 2 miles southeast of Talihina, Le Flore County, June 24, 1948, and as *Waterfall* 8405, silty soil 20 miles southeast of Atoka, Atoka County.

Cory (*op. cit.*) records *A. obovata* from adjacent areas in eastern Texas.

¹ Small, J. K., *Manual of the Southeastern Flora.* 1933.

**ASCLEPIAS VIRIDIFLORA* Raf., var. *LINEARIS* Gray. We have this variety as *Eskew* 531, 1 mile southwest of Blanchard, Grady County, July 29, 1936, and *Waterfall* 7903, slopes of Black Mesa, 3 miles north and 1 mile west of Kenton, Cimarron County, June 13, 1948.

The lateral veins in the leaves of var. *linearis* seem to be much less prominent and are more ascending than in the typical variety.

GILIA RIGIDULA Benth., var. *ACEROSA* Gray. In Oklahoma the author has found this plant only from the caliche ridges east of Guymon in Texas County. It is represented by *Waterfall* 9056.

**MYOSOTIS MACROSPERMA* Engelm. In the folders of *M. verna* I find 3 sheets referable to *M. macrosperma* as the two are differentiated by Fernald.¹ They are: *Hopkins* and *Cross* 1764, swampy woods 2 miles south of Talihina, LeFlore County, May 6, 1937; *M. Hopkins, Aven and Ruth Nelson* 1056, low woods near creek, 3 miles south of Lehigh, Coal County; *Aven and Ruth Nelson* and *George Goodman* 5601, shaded rocky stream bank, 15 miles north of Broken Bow, McCurtain County, April 21, 1946.

**PHYSALIS FENDLERI* Gray. This species has been collected as *Demaree* 13388, top of bluff, John Regnier Ranch, Kenton, Cimarron County, July 28, 1936. We also have *Waterfall* 3155, 7891 and 7915, all so referable, and all collected from the mesa area of northwestern Cimarron County.

PHYSALIS HEDERAEFOLIA Gray, var. **comata** (Rydb.), stat. nov. (*P. comata* Rydb. *Bull. Torr. Bot. Cl.* **22**: 306. 1895). In the western part of the Oklahoma panhandle we have a *Physalis* that looks like *P. hederaeifolia*, but has long (1–2 mm.) flat jointed hairs scattered on the stem, leaves and calyces among the abundant viscid capitate hairs. These plants the author is referring to var. *comata*. Typical *P. hederaeifolia* may have a villous pubescence, of somewhat jointed hairs (up to half as long as in var. *comata*) mixed with the short capitate glandular hairs, but the pubescence seems to be denser and shorter. Referred to var. *comata* are: *Waterfall* 7867, 14 miles east of Hooker, Texas County, June 11, 1948; *Waterfall* 7445, plains north of the Black Mesa, north of Kenton, Cimarron County, July 9, 1947; *Waterfall* 9240, northeast slopes of the Black Mesa, 3 miles north and 1 east of Kenton, Cimarron County, August 10, 1949.

PHYSALIS MOLLIS Nutt., var. *CINERASCENS* (Dunal) Gray. Although our current manuals and check-list do not mention this variety, it is recorded by Rydberg² from both "Indian Territory"

¹ Fernald, M. L., *Another Century of Additions to the Flora of Virginia*. RHODORA **43**: 637. 1941.

² Rydberg, P. A. *The North American Species of Physalis and related Genera*. Mem. Torr. Bot. Cl. **4** (5): 355. 1896.

and "Oklahoma Territory," roughly, eastern and western Oklahoma. We have several sheets in our herbarium.

**SOLANUM ELEAEGNIFOLIUM* Cav., f. *ALBIFLORUM* Cockrell. The white-flowered form was collected as *Waterfall* 7748, plains 5 miles north of Mangum, Greer County, June 2, 1948.

**DYSCHORISTE LINEARIS* (T. and G. apud Engelm. and Gray) Ktze. This species was collected in 1949 as follows: *Waterfall* 9020, short grass pasture, 4½ miles east of Grandfield in Cotton County, June 16; *Waterfall* 9164, on limestone hill 7 miles west and 1 south of Marietta, Love County, July 15; *Waterfall* 9167, "breaks" along Red River 6 miles south and 2½ west of Randlette, Cotton County, July 15. Here it was very abundant.

Kobuski¹ cites specimens from Texas, New Mexico and Mexico. In the Herbarium of Southern Methodist University there are two specimens from Cooke County, Texas, which is adjacent to Love County, Oklahoma. They are: *Whitehouse* 15831, 10 miles south of Gainesville, May 24, 1946; *D. S. Correll and H. B. Correll* 12970, rocky soil, western end of county.

VIBURNUM DENTATUM L., sensu Svenson in *RHODORA* 42: 5. 1940, and Fernald, *RHODORA* 43: 647. 1941. I am referring to this species *Waterfall* 8826, wooded hill, 11 miles south of Bethel, McCurtain County, June 4, 1949.

The fruits are glandular, as are the pedicels, peduncles and upper stem parts; the petioles are hirsute and glandular. Most of the leaf blades are about 8 cm. long and 8 cm. wide, or 8 long and 7 wide, or 9 long and 8 wide; the veins are sparingly pubescent beneath with simple hairs, or with a few capitate-glandular ones; the axils of the veins are quite pubescent. There are a few scattered hairs elsewhere on the lower and also on the upper leaf surfaces. The margins are coarsely dentate to sinuately dentate. We also have *Little and Olmstead* 466, as *Viburnum affine*, var. "*hypoleucum*" (*hypomalacum* Blake), gravel flood plain, Highway 21, north of Cedar Creek, McCurtain County, June 30, 1930. The leaves are smaller, and the blades being mostly about 5 cm. long and 3 to 4½ cm. wide with margins varying from coarsely dentate, through crenately undulate, to almost entire. They are not "*subtus dense pilosa*" as Blake described var. *hypomalacum* (*RHODORA* 20: 14. 1918), but have only a few scattered hairs between the veins of the under leaf surfaces. These data appear

¹ Kobuski, Clarence Emmeren. *A Monograph of the American Species of the Genus Dyschoriste*. *Ann. Mo. Bot. Gar.* 15: 36-39. 1928.

to offer further evidence in accordance with Fernald's statement (RHODORA 43: 647-562. 1941) that leaf size, shape, outline and degree of pubescence seem not to be sufficiently constant, or geographically correlated, to use as a basis for the recognition of species or, possibly, of varieties in this species-concept.

*AMBROSIA ARTEMISIAEFOLIA L., var. ELATIOR (L.) Des-courtils, forma VILLOSA Fern. and Grisc. Of 20 sheets of *A. artemisiaefolia* var. *elatior* in our herbarium 3 are referable to forma *villosa*.

*ASTER HEMAESPHERICUS Alexander. So referred are plants collected as *Waterfall* 8537, prairie 12 miles east of Haleyville, Latimer County, August 9, 1948.

They have the long rootstocks which the author of the species describes as characteristic. I am not familiar enough with *A. pedionomus* to satisfy myself concerning the specific distinctness of the two. The range of the two species is said¹ to include Kansas and Texas, therefore, by inference, Oklahoma.

*BRICKELLIA BRACHYPHYLLA Gray. So referred are: *Waterfall* 8657, north slopes of Black Mesa, 2½ miles north and 1 west of Kenton, Cimarron County, August 23, 1948; *Waterfall* 9244, northeast slopes of Black Mesa, 3 miles north and 1 east of Kenton, Cimarron County, August 10, 1949; *Waterfall* 9223, low stony slopes, 8 miles east of Kenton, Cimarron County, August 9, 1949.

This material has the subplumose pappus, few involucre-bracts, and ovate-lanceolate to lanceolate, sessile or subsessile leaves of *B. brachyphylla*. Robinson (*Mem. Gray Herb.* 1: 46. 1917) states that this species occurs in Texas, Colorado, New Mexico and Arizona, with most of the cited specimens being from New Mexico.

*BRICKELLIA CALIFORNICA (T. and G.) Gray. We have this species as *Waterfall* 8639, sandstone buttes, 8½ miles east and 1 mile south of Kenton, Cimarron County, August 22, 1948, and as *Waterfall* 8692, sandstone buttes south of Tesequite Creek, 1 mile west and 4 south of Kenton, Cimarron County, August 24, 1948.

*CHRYSOTHAMNUS NAUSEOSUS (Pall.) Britt., near ssp. TYPICUS Hall and Clements. So referred is *Waterfall* 9226, plains ½ mile north of Kenton, Cimarron County, August 9, 1949, and *Wm. E. Baker*, Cimarron County, summer 1935.

¹ Small, J. K. *Manual of the Southeastern Flora*: 1391. 1933.

Hall and Clements¹ say that it is "especially common in Wyoming and eastern Colorado".

**CIRSIIUM HORRIDULUM* Mich. This species was collected as *Waterfall* 8887, in pasture along small creek south of Tom, McCurtain County, June 6, 1949.

According to Cory (*op. cit.*) it is known from adjacent areas in Texas.

**EUPATORIUM RUGOSUM* Houtt., var. *ANGUSTATUM* (Gray) Blake. *Hopkins* and *Van Valkenburgh* 6167, deep rich swampy woods in flood plain of the Little River, 6 miles north of Idabel, McCurtain County, October 12, 1941, has the acuminate, coarsely serrate leaves with cuneate bases as described for var. *angustum*^{2, 3} of western Louisiana and Texas.

FRANSERIA ACANTHICARPA* (Hook.) Coville. The genus *Franseria* is recorded by neither Jeffs and Little (*op. cit.*) nor Stemen and Myers (*op. cit.*). The range of *F. acanthicarpa* as stated in the North American Flora, (33** (1): 25. 1922.), "Saskatchewan and Alberta to Missouri, Texas and southern California," might be taken as inclusive of Oklahoma. We have the species as *Waterfall* 9257, valley of Carrizo Creek, 6 miles north of Kenton, Cimarron County, August 11, 1949.

In the fall of 1948, Mr. Stemen, who now collects pollen and other allergens on a commercial basis, brought to the author some young material of a *Franseria* which he believed, apparently correctly, as referable to *F. acanthicarpa*.

FRANSERIA CONFERTIFLORA (D. C.) Rydb. We have several collections of this species from the western part of the Oklahoma panhandle. Rydberg included Oklahoma in his statement of the species distribution (*N. Am. Fl.* **33** (1): 28. 1922.). It is to be noted that 3 species of *Franseria* are now known from Oklahoma, the above two and *F. tomentosa* reported in *RHODORA* **45**: 116. 1943.

**GNAPHALIUM CHILENSE* Spreng. So referred is *Glassman* 1286, top of Mt. Scott, Wichita Mountains, October 26, 1947.

**GNAPHALIUM WRIGHTII* Gray. This species was collected as *Waterfall* 8691, sandstone buttes south of Tesequite Creek, 1 mile west and 4 south of Kenton, Cimarron County, August 24, 1948.

Growing in the same vicinity were *Pinus ponderosa*, *P. edulis*, *Juniperus monosperma*, *Muhlenbergia Porteri*, *Asclepias macrotis*,

¹ Hall, Harvey M. and Frederic E. Clements. *The Phylogenetic Method in Taxonomy*. Carneg. Inst. Wash. Publ. 326. 1923.

² Gray, Asa. *Synoptical Flora* **1** (2): 101. 1884.

³ Fernald, M. L. *Seventh Century of Additions to the Flora of Virginia*. *RHODORA*, **44**: 463. 1942.

Penstemon Fendleri and *Pericome glandulosa*. *G. Wrightii* has been previously known from the adjoining state of New Mexico.

LIATRIS PUNCTATA Hook., var. **coloradensis** (Gaiser), stat. nov., (*L. punctata* Hook., var. *typica* Gaiser, forma *coloradensis* Gaiser, RHODORA 48: 351. 1946).

In the western part of the Oklahoma Panhandle, where it is common, *L. punctata* has the purple, mucronate involucre bracts as described in Gaiser's forma *coloradensis*. I have not found var. *typica* present in this area. Thus var. *coloradensis* seems to be distinct geographically in at least a part of its range from var. *typica*.

*VERNONIA BALDWINII Torr., var. INTERIOR (Small) Schub., forma **alba**, f. nov., corollis albidis. TYPE: *Waterfall* 8472, edge of Clear Lake, 3 miles south and 2 west of Tom, McCurtian County, August 7, 1948. The *type* is in the Bebb Herbarium of the University of Oklahoma.

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NEED FOR CAUTION REGARDING CERTAIN COLLECTIONS

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ONE of the greatest sources of confusion regarding the detailed or the broad ranges of plants is the lack of appreciation in the past, and sometimes in present times, of the sacredness of original data and the danger in labels not coming directly from the collector. The misinformation through which Linnaeus named plants, indigenous only in eastern North America, *Athamanta chinensis* (this becoming *Conioselinum chinense* (L.) BSP.) and *Hydrocotyle chinense* (the coastal *Lilaeopsis chinensis* (L.) Ktze.) is repeated for various plants with other wholly inappropriate or misleading names. Similarly, Michaux too often had on his labels geographic data strikingly contradicting the published statement or, as in the case of his *Angelica triquinata*, evidently written from memory or through confusion of geographic names. His *Angelica triquinata*, "Hab. in Canada", is a good example.